

## CLAIMS

### WHAT IS CLAIMED IS:

1. A method for treating a disease condition in a mammal, comprising:  
administering at least one vaccination of dendritic cells (DCs) to said mammal; and  
administering a cyclooxygenase (COX)-2 inhibiting compound to said mammal to enhance the effect of said at least one vaccination of DCs.
2. The method of claim 1, wherein each of said at least one vaccination of DC comprises from about  $10^5$  to about  $10^7$  DC.
3. The method of claim 1, wherein administering said COX-2 inhibiting compound further comprises administering said COX-2 inhibiting compound in a dose of from about 0.1 to about 10,000 mg per day.
4. The method of claim 1, wherein administering said COX-2 inhibiting compound further comprises administering said COX-2 inhibiting compound in a dose of from about 1.0 to about 1,000 mg per day.
5. The method of claim 1, wherein said COX-2 inhibiting compound is NS-398.
6. The method of claim 1, wherein the disease condition is selected from the group consisting of lung cancer, bladder cancer, colorectal cancer, and brain cancer.
7. The method of claim 1, wherein said disease condition is selected from the group consisting of brain cancer, glioma, astrocytomas, ependymal tumors, glioblastoma multiforme, and primitive neuroectodermal tumors.
8. A method for selectively inhibiting ProstaglandinE<sub>2</sub> (PGE<sub>2</sub>) activity in a mammal, comprising:  
administering at least one vaccination of dendritic cells (DCs) to said mammal; and

administering a cyclooxygenase (COX)-2 inhibiting compound to said mammal to selectively inhibit PGE<sub>2</sub> activity.

9. The method of claim 8, wherein the COX-2 inhibiting compound inhibits the enzymatic activity of PGE<sub>2</sub>.
10. The method of claim 8, wherein the disease condition is selected from the group consisting of lung cancer, bladder cancer, colorectal cancer, and brain cancer.
11. The method of claim 8, wherein said disease condition is selected from the group consisting of brain cancer, glioma, astrocytomas, ependymal tumors, glioblastoma multiforme, and primitive neuroectodermal tumors.